7. (Amended) Loudspeaker protection system according to claim 1, characterised in that the amplifier/attenuator means are controlled such by the processing means that attenuation factors of the amplifier/attenuator means are proportional to:

$$1 / \sqrt{\alpha} + \beta_j \ (1 - 1 / \sqrt{\alpha})$$

where $\alpha = S / S_{norm}$, and β_j represents a factor whose value depends empirically on the particular frequency band j.

8. (Amended) Loudspeaker protection system according to claim 1, characterised in that the loudspeaker protection system comprises a series arrangement of the loudspeaker and a measuring element such as a resistance, whose common connection point is coupled to the processing means to account for actual impedance data of the loudspeaker.

9. (Amended) Loudspeaker protection system according to claim 1, characterised in that the processing means is arranged to initiate control in a shorter amount of time than that control is withdrawn.

10. (Amended) Audio set provided with a loudspeaker protection system according to claim 1.

REMARKS

The claims have been amended in order to reformat the claims to delete all multiple dependencies prior to calculation of the filing fee and place the instant application in standard U.S. format.

Entry of this amendment prior to calculating the filing fee is respectfully requested.

Respectfully submitted,

By ______________________
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APPENDIX

4. (Amended) Loudspeaker protection system according to claim 2 ~~or 3~~, characterised in that the processing means are capable of summing S_j over a specified subrange of possible values of j, where j is in the range from 1, 2, ... n.

6. (Amended) Loudspeaker protection system according to claim 4 ~~or 5~~, characterised in that the processing means are equipped to determine S_j or any summation thereof every 0.001 - 2 sec., in particular every .1 - 1 sec.

7. (Amended) Loudspeaker protection system according to claim 1 ~~any of the claims 1-6~~, characterised in that the amplifier/attenuator means are controlled such by the processing means that attenuation factors of the amplifier/attenuator means are proportional to:

$$1 / \sqrt{\alpha} + ß_j \ (1 - 1 / \sqrt{\alpha})$$

where $\alpha = S / S_{norm}$, and $ß_j$ represents a factor whose value depends empirically on the particular frequency band j.

8. (Amended) Loudspeaker protection system according to claim 1 ~~any of the claims 1-7~~, characterised in that the loudspeaker protection system comprises a series arrangement of the loudspeaker and a measuring element such as a resistance, whose common connection point is coupled to the processing means to account for actual impedance data of the loudspeaker.

9. (Amended) Loudspeaker protection system according to claim 1 ~~one of the claims 1-8~~, characterised in that the processing

means is arranged to initiate control in a shorter amount of time than that control is withdrawn.

10. (Amended) Audio set provided with a loudspeaker protection system according to claim 1 ~~one of the claims 1-9~~.